AMENDMENTS TO THE CLAIMS:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

Listing of Claims:

Claims 1.-28. (cancelled).

29. (Currently Amended) A method of manufacturing a semiconductor device, comprising the steps of:

providing a substrate having a main surface, a back surface opposite the main surface, a plurality of product forming areas arranged in a matrix, with spaces therebetween, on the main surface and connecting electrodes formed on each of the plurality of product forming areas;

providing a plurality of semiconductor chips having a main surface, a back surface opposite the main surface thereof and electrode pads formed on the main surface thereof;

mounting the plurality of semiconductor chips on the plurality of product forming areas, respectively;

after the mounting step, treating the main surface of the substrate by plasma;

providing a molding die having a cavity therein;

after the treating step by plasma, arranging the substrate in the molding die as the plurality of semiconductor chips are positioned in the cavity and the plurality of product forming areas are facing to the cavity;

after the arranging step, block molding a resin enclosure sealing the plurality of semiconductor chips and the plurality of product forming areas by injecting resin into the cavity; and

after the block molding step, cutting the resin enclosure and the substrate along a periphery of each of the product forming areas,

wherein the cavity of the molding die has two sides opposed to each other, a ~~gate~~ plurality of gates formed on one side, of the two sides, and ~~an~~ a plurality of air ~~vent~~ vents formed on the other side of the two sides, and

wherein in the block molding step, the resin is injected into the cavity from the ~~gate~~ gates on the one side to the air ~~vent~~vents on the other side.

30. (Cancelled).

31. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein in the treating step by plasma, impurities remaining on the main surface of the substrate are removed.

32. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein in the treating step by plasma, the main surface of the substrate is roughened.

33. (Previously Presented) A method of manufacturing a semiconductor device according to claim 32, wherein the substrate is comprised of resin.

34. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein the resin enclosure comprises a plurality of fillers.

35. (Previously Presented) A method of manufacturing a semiconductor device according to claim 34, wherein a volume content of the plurality of fillers in the resin enclosure is more than 80 volume percent.

36. (Previously Presented) A method of manufacturing a semiconductor device according to claim 35, wherein the plurality of fillers are comprised of silica fillers.

37. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein in the mounting step, the electrode pads of the semiconductor chips are electrically connected with connecting electrodes of corresponding product forming areas.

38. (Previously Presented) A method of manufacturing a semiconductor device according to claim 37, wherein in the mounting step, the substrate is heat treated.

39. (Currently Amended) A method of manufacturing a semiconductor device according to claim 29, wherein in the block molding step, peripheral space of the cavity

is provided between the plurality of product forming areas and the plurality of air ~~vent~~vents, and wherein a width of the peripheral space is larger than a width of spaces between the plurality of the product forming areas in plan view.

40. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein in the treating step by plasma, impurities remaining on the main surface of the substrate are removed.

41. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein in the treating step by plasma, the main surface of the substrate is roughened.

42. (Previously Presented) A method of manufacturing a semiconductor device according to claim 41, wherein the substrate is comprised of resin.

43. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein the resin enclosure comprises a plurality of fillers.

44. (Previously Presented) A method of manufacturing a semiconductor device according to claim 43, wherein a volume content of the plurality of fillers in the resin enclosure is more than 80 volume percent.

45. (Previously Presented) A method of manufacturing a semiconductor device according to claim 44, wherein the plurality of fillers are comprised of silica fillers.

46. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein in the mounting step, the electrode pads of the semiconductor chips are electrically connected with connecting electrodes of corresponding product forming areas.

47. (Previously Presented) A method of manufacturing a semiconductor device according to claim 46, wherein in the mounting step, the substrate is heat treated.

48. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein in the mounting step, the electrode pads of the semiconductor chips are electrically connected with connecting electrodes of corresponding product forming areas.

49. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein the treating step by plasma is performed so as to increase wettability to said substrate of the resin, of the resin enclosure, used in the step of block molding.

50. (Previously Presented) A method of manufacturing a semiconductor device according to claim 49, wherein said wettability of the resin, of the resin enclosure, to the substrate, is sufficiently increased by the treating step by plasma so as to dislodge voids during the block molding.

51. (Previously Presented) A method of manufacturing a semiconductor device according to claim 49, wherein said wettability of the resin, of the resin enclosure, to the substrate, is sufficiently increased by the treating step by plasma so as to dislodge voids, during the block molding, that are behind the semiconductor chips in the direction of flow of the resin during the block molding.

52. (Previously Presented) A method of manufacturing a semiconductor device according to claim 51, wherein the treating step by plasma uses an oxygen or argon gas.

53. (Previously Presented) A method of manufacturing a semiconductor device according to claim 49, wherein the treating step by plasma uses an oxygen or argon gas.

54. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein the treating step by plasma uses an oxygen or argon gas.

55. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein said cavity has additional sides to said two sides, the additional sides also having air vents.

56. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein said cavity has four sides in total, including said two sides opposed to each other and an additional two sides opposed to each other, the four sides forming a quadrilateral, and wherein said additional two sides also have air vents.

57. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein said plasma treatment is performed such that, in the block molding step, voids at positions behind the semiconductor chips in the direction of flow of the resin are dislodged and move in response to the flow of the resin in the block molding step.

58. (Previously Presented) A method of manufacturing a semiconductor device according to claim 29, wherein the plasma treatment is performed such that, in the block molding step, voids are dislodged and move in response to the flow of resin in the block molding step.

59. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein said cavity has additional sides to said two sides,

the additional sides also having air vents.

60. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein said cavity has four sides in total, including said two sides opposed to each other and an additional two sides opposed to each other, the four sides forming a quadrilateral, and wherein said additional two sides also have air vents.

61. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein said plasma treatment is performed such that, in the block molding step, voids at positions behind the semiconductor chips in the direction of flow of the resin are dislodged and move in response to the flow of the resin in the block molding step.

62. (Previously Presented) A method of manufacturing a semiconductor device according to claim 39, wherein the plasma treatment is performed such that, in the block molding step, voids are dislodged and move in response to the flow of resin in the block molding step.

63. (New) A method of manufacturing a semiconductor device according to claim 60, wherein of the four sides of the cavity, two of the sides are longer than the other two sides, said one side having the plurality of gates and said other side, opposite thereto, being the two longer sides.

64. (New) A method of manufacturing a semiconductor device according to claim 29, wherein said cavity has additional sides to said two sides, and wherein said one side having the plurality of gates and said other side, opposite thereto, are longer than the additional sides of the cavity.

65. (New) A method of manufacturing a semiconductor device according to claim 29, wherein after the step of mounting, at least fats and oils are on the main surface of the substrate, and the fats and oils are removed by the treating step by plasma.

66. (New) A method of manufacturing a semiconductor device according to claim 29, wherein in the block molding step the resin is injected from the gates on the one side so as to flow along the main surface of the substrate.